FAX COVER SHEET

TOTAL PAGES: __5__

FROM: Ellen McEntee
Morrison Knudsen Corporation
(303)948-4674

TO: __X__ Bonnie Lavelle, USEPA, Region 8
(303) 312-6897

DATE: ___4/3/00___

MESSAGE:

MORRISON KNUDSEN CORPORATION

10822 WEST TOLLER DRIVE
LITTLETON, COLORADO U.S.A. 80127
PHONE: (303) 948-4000/FAX: (303) 948-4010

April 3, 2000

Ms. Bonnie Lavelle
USEPA, Region 8
999 18th Street, Suite 500
Denver, CO 80202-2466

RE: MDL Study
Vasquez Boulevard/Interstate 70 (VB/I70) Site
Work Assignment 004-RJCO-089R

Dear Bonnie,

Enclosed are results of the MDL study conducted on March 29, 2000. Seven aliquots of a sample were submitted by ISSI for this study (MDL6-1-7). Each aliquot was ground and analyzed individually.

If you have any questions, please call me at (303) 948-4674.

Sincerely,

Ellen McEntee
Project Chemist

Enc.

cc: Marta Green
Kevin Williamson

MDL Study
Vasquez Blvd/I-70

Sample ID	Date/Time Analyzed	Lead (mg/Kg)	Arsenic (mg/Kg)	NIST 2709 Lead %R	NIST 2709 Arsenic %R	Mean		Standard Deviation		Standard Deviation x 3	
						Lead (mg/Kg)	Arsenic (mg/Kg)	Lead	Arsenic	Lead	Arsenic
MDL6-1	3/29/00 1150	159	8								
MDL6-2	3/29/00 1150	123	5								
MDL6-3	3/29/00 1150	134	10								
MDL6-4	3/29/00 1150	132	6								
MDL6-5	3/29/00 1150	130	12								
MDL6-6	3/29/00 1150	124	6								
MDL6-7	3/29/00 1150	144	10	79*	89	135	8	13	3	39	9

*Standard concentration is less than the MDL

MORRISON KNUDSEN CORPORATION

10822 WEST TOLLER DRIVE
LITTLETON, COLORADO U.S.A. 80127
PHONE: (303) 948-4000/FAX: (303) 948-4010

March 28, 2000

Ms. Bonnie Lavelle
USEPA, Region 8
999 18th Street, Suite 500
Denver, CO 80202-2466

RE: XRF Proficiency Demonstration
Vasquez Boulevard/Interstate 70 (VB/I70) Site
Work Assignment 004-RICO-089R

Dear Bonnie,

Enclosed are results of the XRF proficiency demonstration performed by Brian Meyers for the VB/I70 Site. Eight samples were provided by ISSI (sample numbers 8-181311 through 8-181318) for the proficiency demonstration. As requested, all samples were analyzed four times and the results along with the mean and standard deviation have been reported. In addition, the percent relative standard deviation has been reported to demonstrate analytical precision. NIST standards were analyzed with these samples and were within acceptable ranges.

If you have any questions, please call me at (303) 948-4674.

Sincerely,

Ellen McEntee
Project Chemist

Enc.

cc: Marta Green
Kevin Williamson
Brian Meyers

CERTIFIED STANDARDS SUBMITTED FOR PROFICIENCY TESTING

Standard	Lot #	Past Lab ID	Tag #	As (ppm)	As_SD	Pb (ppm)	Pb_SD	Certified?
ERA	57006	–	8-181311	1.73	–	10.7	–	Y
TILL-1	63	–	8-181312	18	1	22	3	Y
TILL-4	122	–	8-181313	111	6	50	4	Y
TILL-3	1303	–	8-181314	87	4	26	3	Y
C4690CYB096	RBS Site	ND-98-929	8-181315	1004	–	1708	–	N
MDL Soil	Phase III Site	–	8-181316	8	0.8	161	2.2	Y
C4701THS-002	RBS Site	ND-98-261	8-181317	14	–	367	–	N
C4701THB-058	RBS Site	ND-98-360	8-181318	47	–	276	–	N

- Not Applicable

	Calculations		Rounded	
	Arsenic (ppm)	Lead (ppm)	Arsenic (ppm)	Lead (ppm)
Pooled Variance	3.5	17.4	3.6	17.3
Site MDL	10.6	52.2	11	52
Site PQL	35.3	174.1	36	173

VB/I-70 PROFICIENCY SAMPLE RESULTS
ANALYZED BY BRIAN MEYERS

Date	Time	Sample ID	RESULTS		Mean		Std. Dev.		% RSD	
			Pb (mg/kg)	As (mg/kg)	Pb	As	Pb	As	Pb	As
3/21/00	13:17	8-181311-1	23	2						
3/21/00	13:17	8-181311-2	18	7						
3/21/00	13:17	8-181311-3	25	6						
3/21/00	13:17	8-181311-4	23	2	22	4	3	3	13	62
3/21/00	13:17	8-181312-1	16	20						
3/21/00	13:17	8-181312-2	16	18						
3/21/00	13:17	8-181312-3	16	20						
3/21/00	13:17	8-181312-4	17	19	16	19	1	1	1	5
3/21/00	13:17	8-181313-1	40	106						
3/21/00	13:17	8-181313-2	42	105						
3/21/00	13:17	8-181313-3	45	98						
3/21/00	13:17	8-181313-4	38	109	41	104	3	5	7	4
3/21/00	16:07	8-181314-1	16	88						
3/21/00	16:07	8-181314-2	18	86						
3/21/00	16:07	8-181314-3	16	91						
3/21/00	16:07	8-181314-4	23	82	18	87	3	4	18	4
3/21/00	16:07	8-181315-1	1388	751						
3/21/00	16:07	8-181315-2	1747	844						
3/21/00	16:07	8-181315-3	1467	764						
3/21/00	16:07	8-181315-4	1641	800	1561	790	163	42	10	5
3/21/00	13:17	8-181316-1A	155	10						
3/21/00	13:17	8-181316-2	159	13						
3/21/00	13:17	8-181316-3	165	19						
3/21/00	13:17	8-181316-4	197	18	169	15	19	4	11	28
3/21/00	16:07	8-181317-1B	345	9						
3/21/00	16:07	8-181317-2B	355	10						
3/21/00	16:07	8-181317-3B	340	23						
3/21/00	16:07	8-181317-4B	345	18	346	15	6	7	2	44
3/21/00	16:07	8-181318-1	243	82						
3/21/00	16:07	8-181318-2	244	82						
3/21/00	16:07	8-181318-3	244	82						
3/21/00	16:07	8-181318-4	252	75	246	80	4	4	2	4
3/21/00	13:17	NIST2704	94% (%Recovery)	108% (%Recovery)						
3/21/00	16:07	NIST2709	63%* (%Recovery)	116% (%Recovery)						

*: Known concentration is less than the MDL